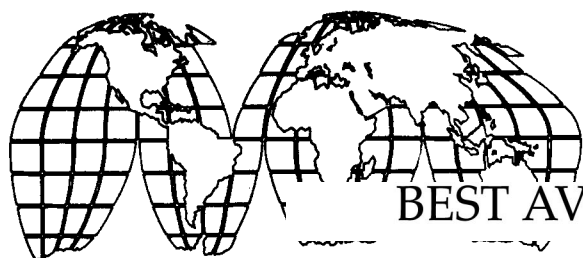


A.I.D. Technical Report No. 2

Center for Development Information and Evaluation



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**Evaluation of A.I.D.
Child Survival Programs
*Haiti Case Study***

AGENCY FOR INTERNATIONAL DEVELOPMENT

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May 1992

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A.I.D. Technical Report No. 2

Evaluation of A.I.D. Child Survival Programs *Haiti Case Study*

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Foreword

In the mid-1980s, the Agency for International Development (A.I.D.) greatly expanded its program of child survival activities worldwide. As part of the evaluation of this program, CDIE is conducting six country case studies to provide A.I.D. policymakers and senior managers information on the impact of the Agency's program on reducing infant and child mortality and strengthening the primary health care system of those countries. The country case studies completed to date are Egypt, Haiti, Indonesia, and Morocco. Fieldwork has been completed for the final two countries in the series—Bolivia and Malawi. The case studies will culminate in a program assessment report that will be published later this year.

This study of child survival in Haiti is the fourth in the series. It was performed in 1991 by a four-person evaluation team that spent 3 weeks in the country. While the intended audience is A.I.D. policymakers, managers, and technical experts, we hope that the observations will also prove useful to Haitian colleagues and to colleagues in other agencies. Our chief concern is that child survival programs still in a nascent stage of development or grappling with problems of sustainability and rapid change are able to learn from the Haitian experience.

Program and Operations Assessment Division
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May 1992

Preface

Since 1985, the Agency for International Development (A.I.D.) has significantly expanded its program of child survival activities around the world by committing more than \$1 billion to the program. As part of a worldwide review of this program, the Center for Development Information and Evaluation (CDIE) is undertaking an Agency-level evaluation to provide A.I.D.'s policymakers and senior managers with information on the impact of the Agency's child survival program.

The fourth of six case studies conducted under the evaluation, this review of the child survival program in Haiti addresses (1) the impact of child survival activities on reductions in infant and child mortality; (2) the impact of A.I.D.'s child survival strategy on the health care delivery system, and primary health care in particular; (3) factors associated with successful child survival strategies; and (4) a future agenda for the design and implementation of child survival programs in Haiti.

While the Ministry of Health, through its Nouvelle Orientation policy established in 1982, outlines seven priority areas as part of its primary health care program, the Ministry and the A.I.D. Mission have focused on four major interventions for child survival: an expanded immunization program, control of diarrheal disease, family planning, and nutrition. We reviewed these four program activities in detail. While A.I.D. has not been the only donor financing these activities, it has provided the most significant level of support, and we have concentrated on the impact of A.I.D.-supported interventions.

Our four-person team spent 3 weeks in Haiti reviewing the major components of the A.I.D. child survival program that operated throughout the 1980s and the impact of that program on infant and child mortality. We benefited tremendously from the advance preparation undertaken by the Health, Population and Nutrition Office of the A.I.D. Mission, which included a thorough background report (prepared by team member Maggie Huff-Rousselle) on the evolution of the child survival program in Haiti and A.I.D. investments in the program. Due to time constraints and the amount of background research that had already been conducted, we relied heavily on the use of secondary data, in addition to multiple interviews with a broad range of individuals, and first-hand observation during site visits. Gaps

in data exist.¹ In all, the team collectively conducted a literature review of over 200 documents, interviewed over 75 people, and visited a dozen project sites in Haiti, both in the remoter areas of the North and South and in the more immediate vicinity of Port-au-Prince. The data available, however, did not allow for in-depth comparisons among various sites or delivery approaches. In addition, since this review looked at the entire country, comparisons between interventions and control areas were impossible within the time frame of the evaluation.

We hope that our conclusions and reflections will be useful to our Haitian colleagues, to the A.I.D. Mission, to A.I.D. policymakers and managers, and to colleagues in other countries who are implementing child survival programs.

¹ A.I.D. was the major funder for the Mortality, Morbidity, and Service Utilization Survey (EMMUS), which is often cited as the best national data source.

Acknowledgments

Particularly because of the people we met and with whom we worked, this evaluation was a challenging and enriching experience for each member of the team.

We are grateful for the insights obtained from Haitian colleagues, who have both a historic perspective and a keen sense of responsibility for Haiti's future: Dr. Gerald Lerebours, Dr. Josette Bijou, and Dr. Jean Andre of the Ministry of Public Health and Population; Dr. Jean Pape of the National Research Center; Dr. Reginald Boulos and Sabrina Jarr of the Centres Pour le Developpement et la Sante (CDS); Dr. Frantz Simeon and Dr. Phillippe Hirsch of the Association des Oeuvres Privees de Sante (AOPS); Dr. Michel Cayemittes and Dr. Antoine Augustin of the Child Health Institute (CHI); Dr. Serge Pintro of PROFAMIL; and Dr. Eddie Genece of AIDSTECH.

We also benefited from the experience in Haiti of Dr. Xavier Leus of Pan American Health Organization (PAHO)/World Health Organization (WHO), Dr. Jon Rohde of UNICEF, Dr. Joe Wray of Columbia University, and Linda Morse of A.I.D./Washington.

Last, but certainly not least, we are grateful to the A.I.D. Mission for its support. Through Dr. Mike White, David Eckerson, and Sheila O'Rourke we gained a sense of their optimism, commitment, and determination that have been prerequisites for being able to function in the midst of the chaos that reigned in Haiti throughout the period that this evaluation covers. Dr. White's 6-year residency in Haiti ended during our visit, and, among the many farewell events held in his honor, the Ministry of Health presented him with a plaque. This was, according to his Haitian colleagues, the first time anyone had received such recognition from the Ministry. It is the kind of professional and personal impact that every A.I.D. staff member should aspire to achieve.

Summary

The A.I.D. child survival program in Haiti has had a positive impact on the health of children and has assisted in reducing overall rates of infant and child mortality in Haiti. In some areas, such as the Cite Soleil slum in Port-au-Prince that is currently receiving more than half of its funding from A.I.D., the infant mortality rate (IMR) declines have been much more dramatic than for the country as a whole.

Infant and child mortality rates have been falling in Haiti over the past two decades. During the early 1970s, estimated infant mortality was 144 per 1,000 live births; by the late-1980s, it was estimated at roughly 100 per 1,000 live births. Although infant and child mortality rates are still high in Haiti compared with other developing countries, the pace of the decline has been comparable with the general decline in lesser developed countries.

These improvements in infant and child survival have occurred despite zero or negative economic growth, a decaying public sector infrastructure, and social and political instability and decline: indicators whose improvement is normally linked to decreasing child mortality rates. The declines in infant and child mortality rates are therefore attributable to efforts in health education and promotion, and increased access to primary health care, with a particular focus on outreach and child survival interventions.

Some notable contributions of the A.I.D. child survival program have been as follows:

- Support of public and private sector policy formulation that established child survival initiatives as a health sector priority in Haiti
- Development of a new outreach approach to health service delivery that has expanded access to care, particularly in rural areas
- Financial support to an array of private voluntary organizations that now provide health services to roughly 30 percent of the population
- The fostering of a partnership between the public and nonprofit health sectors
- Establishment and support of a core of indigenous organizations that now provide research, training, and technical assistance to the health sector
- Human resource development and training for health care providers and managers within the public and private sector

The key findings and recommendations of our review are categorized below.

Key Findings

Impact on Mothers and Children

Despite negative socioeconomic indicators and political instability in Haiti over the past decade, there has been a steady decline in child and infant mortality rates. This finding reaffirms the opinion that child survival programs can have a positive impact and produce solid gains, despite socioeconomic deterioration.²

The significant decrease in neonatal tetanus and the apparent eradication of polio are notable specific successes of child survival interventions in Haiti. These successes are largely the result of targeting both high contributors to IMR, such as tetanus and diarrheal disease, and geographic pockets of high IMR, such as urban slums.

Due to the declining economic situation, however, overall nutritional status has not improved, despite extensive feeding programs. Severe and moderate malnutrition continue to affect as much as 60 percent of the under-5-years population and undermine other health status gains.

Future progress in child survival, or even maintenance of recent accomplishments in reducing IMR, are threatened by the high prevalence of AIDS in Haiti, reported to be 10.3 percent in 1988 among pregnant women in the Cite Soleil slum area.

Impact on the Health Delivery System

Focusing resources on a few select interventions, such as control of diarrheal disease and the expanded program of immunization, enabled Haiti to demonstrate important achievements in child survival. A.I.D. provided leadership for this movement by supporting the development of the Government's national primary health care policy—*Nouvelle Orientation*—and by further targeting these programs; pro-

² Because of lack of data, the evaluation team was unable to estimate the number of infant and child deaths prevented/averted or to determine the average cost per death prevented/averted. Work has recently started in Haiti to measure cost of programs and compare that to impact so estimates may be possible in the future.

vided funding for preventive outreach programs (such as community health workers, community-based distribution workers, mothers clubs, vaccination days, and rally posts); and encouraged the establishment of a prototype for the delivery of health care services.

The targeted programs met with initial success, but their success subsequently declined due to a number of factors, including premature integration of the programs into the general health delivery system and the refocusing of energy and resources on a subsequent intervention. In order to achieve and maintain impact through targeted programs, consistent long-term commitment and support are necessary.

Impact on Public and Nonprofit Sector Interaction

The cooperation between the public and private sectors in health services delivery in Haiti was essential for the gains in child survival. A.I.D., through significant funding to the nonprofit private sector, has played a major role in facilitating the development of this important partnership. Much of the health care in Haiti is currently being delivered through the *institution mixtes* (i.e., public and private cooperation in providing services, where, for example, staff and staff salaries are provided by the Government and program support and administration are funded through private organizations).

The public/private model which has evolved in Haiti is one that other countries could emulate, although the successes achieved were not easy and the collaboration has been uneven. The Haiti model required and continues to require substantial coordination, trust, and flexibility.

Impact on Institutional Development and Research

A significant A.I.D. contribution in Haiti has been to enhance institutional and human resource development and capacity within a number of indigenous organizations which support health care delivery, training of health personnel, health research, and the dissemination of health information.

To a greater degree than a number of other countries, Haiti has conducted and benefited from a range of research activities, funded through A.I.D.-supported programs, such as the study of Mortality, Morbidity and Service Utilization (EMMUS), the National Contraceptive Prevalence Survey, and more specific research including studies on measles, fertility patterns, and AIDS. This research has helped establish baseline data, develop program targets, measure the success of child survival interventions, and formulate health policies and strategies in selected areas.

Through the earlier public sector projects, as well as later projects, A.I.D. has made an enduring contribution through training in public health for a core cadre of Haitian professionals many of whom are now in key positions in the health sector.

Key Recommendations

Continue and Further Refine Targeting. Since neonatal deaths still comprise roughly 40 percent of infant deaths, interventions should be concentrated on the causes of death for this age group, including changing the immunization strategy to increase access and demand for tetanus vaccination for women. The immunization program should also devote more attention to infants under 1 year old. Nutrition interventions should be reaching the most vulnerable group, children under 5 years old, in preference to school-age children. Geographical targeting should continue to include urban slums and, when possible, attempt to expand access to rural drought areas.

Increase the Priority of Family Planning. The relationship between child spacing and mortality beyond the neonatal period is strong in Haiti, and there may be significant potential for increasing contraceptive prevalence given the high levels of demand for family planning.

Sustain Support for Child Survival Interventions. Given the pattern of initial success and subsequent decline for child survival interventions, all programs should have sustained support in terms of both financial resources and the energy and attention of personnel. Support is needed for both the public and nonprofit sectors in the areas of policy formulation, strategic planning, project design and implementation, and the development and establishment of operating systems. Based on a clearer understanding of what influences health-seeking behavior, all programs need a health promotion strategy with clear objectives, targets, and monitoring and evaluation plans.

Continue Policy Dialogue and the Public/Nonprofit Partnership. The Ministry needs to act on a series of long-standing policy issues, such as reducing personnel levels and reallocating personnel to rural areas. It will be important in the future to build on what exists rather than making major changes in strategy that might erode past successes. The partnership between the public and nonprofit sectors needs to be further developed and better coordinated, based on the potential strengths of both sectors.

Glossary

AGAPCD	Agence d'Approvisionnement des Pharmacies Communautaires
A.I.D.	Agency for International Development
AOPS	Association des Oeuvres Privees de Sante
CDD	control of diarrheal disease
CDS	Centre pour le Developpement et la Sante
CHI	Child Health Institute
CINEC project	Community Integrated Nutrition and Education Centers project
CWSD	Community Water System Development project
<i>dechoukage</i>	Creole word meaning uprooting
EMMUS	Mortality, Morbidity, and Service Utilization Survey
EPI	expanded program of immunization
IMR	infant mortality rate
INHSAC	Institut Haitien de Sante Communautaire
IPPF	International Planned Parenthood Foundation
LAC	Bureau for Latin America and the Caribbean
MCH	maternal child health
NOVA	Nutrition, ORS, and Vitamin A

ORS	oral rehydration solution
ORT	oral rehydration therapy
PAHO	Pan American Health Organization
PROFAMIL	Associatipon pour la Promotion de la Planification Familiare
PVO	private voluntary organization
RHDS	Rural Health Delivery Systems project
RICHS project	Resources in Community Health Education Support
SNEP	National Potable Water Service

Country Background

Haiti is the least developed country in the Western Hemisphere, and, by any commonly used socioeconomic criteria, ranks in the lowest quadrant worldwide. It is more readily compared with sub-Saharan African nations than with other countries in the Western Hemisphere.

Haiti occupies the western third of Hispaniola, the second largest island in the Caribbean, which it shares with the Dominican Republic. The terrain of western Hispaniola is very mountainous, and, with a population of approximately 6.5 million, Haiti is considered one of the most densely populated countries, per arable acre, in the world. The annual rate of natural increase is approximately 2 percent. There is much external migration as *refugies de la mer* (boat people) try to escape their impoverishment for a better life, and, although the population is roughly 70 percent rural, there has been much internal migration toward urban areas, particularly the capital city of Port-au-Prince, where approximately 20 percent of the population lives.

French is the official language, but Creole is the language of the Haitian people. A standard phonetic spelling for Creole has been developed during the past 20 years, and literacy has risen to an estimated 37 percent.

During the colonial period, Haiti was considered the richest colony in the New World, the Pearl of the Antilles. After the revolution of 1804, a combination of isolation from the rest of the world, a string of questionable leaders, and a movement in agriculture (the primary economic sector) to subsistence farming contributed to socioeconomic decline and environmental degradation. Through a combination of the type of agriculture practiced, the population per arable acre, and the dependence on charcoal for fuel, Haiti has lost most of its trees and developed severe erosion problems.

Since 1804, when Haiti became the first black republic in the world, the country has been ruled primarily through dictatorships. From 1915 to 1935, the United States occupied the country. The longest enduring dictatorship, the Duvalier Regime, lasted nearly 30 years, as power was passed from Papa Doc to Baby Doc. In February 1986, Jean Claude Duvalier left the country as a result of a grass-roots revolution called *dechoukage*. Dechoukage, a special Creole word meaning uprooting, now connotes the powerful expulsion of something evil.

Between February 1986 and the end of the decade, a single election, which was both nonrepresentational and violent, was attempted, and four coups d'états occurred. The disruption of public services through frequent changes in ministers and

other key officials continued as it had during the Duvalier period. The country was not as rigidly controlled as it had been during the Duvalier period, and the new openness meant less stability with frequent strikes, protests, and popular movements. Both private and public sectors were in constant disruption. Power cuts could last 3 days; public water systems were often inoperative; and basic commodities, such as gasoline, were not available for weeks at a time. This was the environment in which the Agency for International Development's (A.I.D.) child survival program operated.

The sociopolitical disruption led to economic decline. With the lack of economic development and increasing population, unemployment rose. By the end of the decade the parallel monetary market that had developed was paying a differential of 45-50 percent for foreign exchange. In 1988, the real buying power of salaries in Haiti was 22 percent below the 1984 level. The poorest Haitian families were affected most drastically and became even less able to provide adequate housing and nutrition for their children (Clermont 1990).

In the fall of 1990 Father Jean-Bertrand Aristide was elected President with 67 percent of the votes in Haiti's first popular national election. Aristide, a Catholic priest in the liberation theology tradition, was a leader in the *ti legliz* (little church) movement that is often credited as a consciousness-raising force that led to dechouckage (Beach 1991).

Political power has not yet stabilized, and all of the country's seemingly overwhelming socioeconomic problems represent a challenge for even the strongest of governments. However, the popular success of the free elections, combined with the army's support of the democratically elected government, revived a cautious optimism in Haiti's potential for future development at that time.

In November 1987, after the first failed attempt at a democratic election, A.I.D. funding to the public sector was withdrawn. Prior to that time, A.I.D. had already begun to support child survival efforts through both indigenous and U.S. private voluntary organizations. The withdrawal of funding to the public sector resulted in increased funding for the private nonprofit sector, and encouraged greater collaboration between the two sectors. Several months after the successful election, A.I.D. announced increased economic assistance to support Haiti's transition to democracy, but the recent military coup suspended most external aid to Haiti.

The A.I.D. Child Survival Program in Haiti

During the 1980s, A.I.D. invested more than \$100 million in health, population, nutrition, and water projects that directly or indirectly supported child survival activities. In addition to the projects shown in the Appendix, approximately \$5 million went to UNICEF and the Pan American Health Organization (PAHO) through the A.I.D. Mission or A.I.D.'s Latin America and the Caribbean (LAC) Bureau in Washington and other centrally funded A.I.D. health and population projects. Of the total investment, between \$30 and \$35 million can be considered directly related to child survival.

The A.I.D. focus of support shifted from the public sector to the private voluntary sector during the latter half of the decade. To a large degree, this shift was the result of political instability and the failure of the post-Duvalier Government to hold democratic elections, combined with weaknesses in the public sector and, therefore, the relatively poor performance of earlier public sector projects. Direct investment for health and population in the public sector during the first half of the decade was more than \$50 million.

In addition to providing funding for infrastructure development, a major long-term contribution of the public sector projects supported by A.I.D. in the early 1980s was the training of young health professionals. Today there is a cadre of trained professionals in the public and private nonprofit health sectors who are now in positions where they can assume responsibility and wield some influence over the future of health care in Haiti.

In the early 1980s, the Ministry initiated two major changes in the strategy for delivering child survival and other primary health care services. These strategies were further evolved later during the decade through the various PVO projects.

The first was the identification of and focus on priority programs that reflected primary health care needs in Haiti. This was a consolidated movement within the Ministry, the donor community, and many of the PVOs providing health services. Six priority programs were identified by the Ministry in its *Nouvelle Orientation* issued in 1982; the AIDS program was later added to make a seventh. The establishment of these priority programs was influenced by the A.I.D.-funded Rural Health Delivery Systems project, and the *Nouvelle Orientation* encompassed, and therefore set the stage for, the four key interventions included in A.I.D.'s child survival program: (1) expanded program of immunization (EPI), (2) control of diarrheal disease (CDD), (3) family planning, and (4) nutrition status monitoring and supplementation, including promotion of breast-feeding and vitamin A supplementation.

The second major change in strategy was the movement away from facility-based service delivery to outreach programs, and particularly rally posts. This change in strategy was influenced by the success of two earlier community outreach initiatives in the health sector: the experience of the Albert Schweitzer Hospital at Des Chapelles in the Artibonite Valley, and the Integrated Project for Public Health and Population at Petit-Goave (Saulniers 1978).

Although both public and private sector projects funded by A.I.D. built on the outreach models established at Schweitzer and Petit-Goave, the rally post approach to service delivery was not widely proliferated until A.I.D. began to fund the Association des Oeuvres Privees de Sante (AOPS), an umbrella PVO that provides grants to other PVOs. This strategy of community outreach, particularly through rally posts, characterized A.I.D. child survival projects during the latter part of the decade.

These two shifts, away from facility-based service delivery and toward priority programs in primary health care, also paralleled worldwide trends in A.I.D. policies as well as those of other key donors.

While the A.I.D. Mission's strategy of priority or selected primary health care interventions was consistent throughout the decade, the focus of attention shifted between the specific child survival interventions. Family planning and nutrition received more attention in the late 1970s and the early 1980s, but attempts to integrate nutrition, family planning, and malaria activities into the Ministry, all of which had been operating as separate institutions or departments of the Ministry, were done prematurely and seemed to create more problems than were solved (Allman 1987). Attention and resources also shifted first from family planning and nutrition to CDD, and then from CDD to EPI.

The shift of funding to the nonprofit private sector, through PVOs, put additional management pressures on A.I.D. staff in Haiti. While there was once one institution receiving assistance in the health sector—the Government of Haiti—by the end of the decade, there were dozens of private nonprofit organizations receiving some form of funding from A.I.D.

In addition to support for U.S.-based PVOs, A.I.D. has created or greatly expanded a core group of indigenous PVOs that play a critical role in the Haitian health sector. The first agency to be created by A.I.D. was the Agence d'Approvisionnement des Pharmacies Communautaires (AGAPCO). First established in 1981, AGAPCO, which procures, distributes, and sells essential drugs, may be most notable for simply having survived for 10 years even though, as a semiautonomous agency of the Ministry, its A.I.D. funding was cut at the end of 1987 (Huff-Rousselle 1989). Centres pour le Developpement et la Sante (CDS) was established before the

A.I.D. child survival program began, but, with A.I.D. funding, its service population has expanded beyond the slum of Cite Soleil, with a population of 150,000, to other urban areas. CDS now covers a population of about 500,000, or 10 percent of the population of Haiti with access to health care. AOPS received an A.I.D. grant shortly after it was created. Largely through a series of A.I.D. grants, AOPS provides grants and other assistance to PVOs that are providing health services directly. The Child Health Institute (CHI), created under an A.I.D. grant, conducts and disseminates health research that will support the design and implementation of health and particularly child survival programs in Haiti. Finally, Institut Haitien de Sante Communautaire (INHSAC), also created under an A.I.D. grant, provides training in public and community health.

Many of the PVOs have moved from being small institutions offering limited services parallel to those of the Ministry to institutions operating in partnership with the Ministry. This shift occurred because the Ministry had a large number of underutilized facilities it was willing to allow PVOs to manage through various formal and informal agreements. This shared responsibility for health delivery and the strategy of selected interventions has resulted in more consistency between the private nonprofit and public sectors. Particularly given the current size of the private nonprofit health sector, the partnership is a development that has created new problems of management and coordination even while it was solving old ones. However, given the circumstances in Haiti during the past decade, it is difficult, even in hindsight, to suggest an alternate strategy that could have had more beneficial results.

From FY 1989 through 1991, the A.I.D. Mission's child survival strategy focused on the following (USAID/Haiti 1989):

- Promotion of improved cooperation between the Ministry and PVO health service providers
- Expansion of the delivery of key child survival interventions, specifically (1) increasing vaccination coverage (especially measles immunizations and tetanus toxoid), (2) increasing the utilization of ORS for prevention of dehydration due to diarrhea, (3) improving infant feeding practices, and (4) promoting birth spacing
- Extension of PVO-operated health and child survival services with an increased emphasis on urban and peri-urban slum populations
- Provision of technical assistance to assist PVOs to better plan, manage, and implement child survival programs and improve the effectiveness of outreach services

- Strengthening of PVO service support agencies, so that these in turn are able to provide sustained technical and management assistance to the services-delivery agencies
- Development of the child survival potential of the three major PVO-administered feeding programs
- Promotion of low-cost water technology as a catalyst for child survival programs
- Encouragement of and striving for stronger donor coordination and collaboration to make efficient use of scarce resources and to avoid duplication and overlap

Program Results and Impacts

Expanded Program of Immunization

Retrospective

Of the four key child survival interventions, EPI is the best example of what can be achieved through a focused, targeted program with clear objectives, strong donor support, and government commitment. While it can be argued that EPI is more easily implemented than the other key child survival interventions, the EPI program in Haiti has demonstrated that services can reach approximately 70 percent of the population. The reduction in neonatal tetanus (using EPI and training traditional birth attendants) and apparent eradication of polio are the most notable specific successes of the child survival program in Haiti.

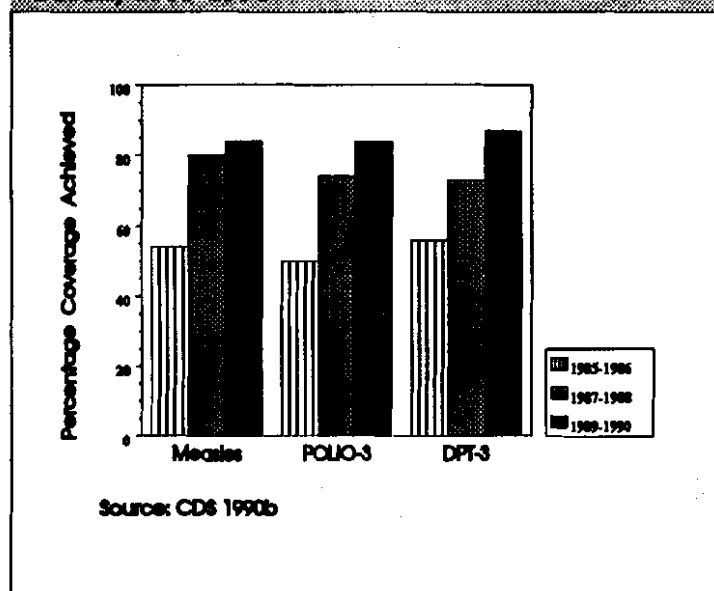
When EPI began in 1979, vaccinations were provided at health facilities and through community health workers. In 1985, as childhood immunizations became the focus of new international programs and funding, the Government made EPI a priority, and the program was rapidly accelerated. A.I.D., PAHO, UNICEF, and Rotary International were major external supporters of EPI, and, over the span of the decade, there was a significant increase in immunization coverage rates throughout the country. Rally posts, particularly through A.I.D.-funded PVOs, became a key strategy for the delivery of immunization services. Health facilities offered daily vaccinations and, in some areas, mobile horse teams were used. In 1988, a campaign approach to EPI, through National Vaccination Days, was introduced.

The National Vaccination Days were a major influence in the increase in immunization coverage rates: nearly half of all vaccinations given during 1988 were attributed to these days. However, the Ministry has recently decided not to use this approach because of the logistical and financial burden it puts on the delivery system. It appears that public awareness of the importance of EPI has been increased through the campaign approach, and this awareness may help to sustain demand for facility-based vaccinations. While overall coverage declined during 1989 and 1990 when National Vaccination Days were not as widely used, the coverage provided through fixed facilities and rally posts did increase. In addition to increasing coverage, quality of services and health education are critical areas for the future, as drop-out rates between the first and third doses of DPT and Polio were estimated at about 40 percent in 1989 (Carnell 1990).

The EPI program portfolio operating through A.I.D.-funded PVOs has shown even more rapid increases in coverage than the national rates, and, in general, the PVOs have maintained program stamina and continued to increase coverage even when national rates declined. The A.I.D.-funded CDS program in the Cite Soleil slum, covering a population of 150,000, significantly increased coverage rates during the second half of the decade (see Figure 1). Many individual A.I.D. child survival projects, such as Eye Care in Mirebalais and International Child Care in various locations, had excellent increases in coverage over a 2-year period. Initiatives that did not offer EPI services directly, like the Foster Parents Child Survival project in Jacmel, showed that education and referral could increase coverage levels above those achieved by direct service providers operating in the same service area. Even the weaker PVOs showed solid performance: weighted averages of coverage for PVOs funded through the A.I.D. AOPS grants were more than double the national rates at the end of the decade.

A.I.D.-funded research studies and surveys have played a key role in immunization strategy formulation and implementation of programs. A 1982 study (Holt 1990) in Cite Soleil showed that children who survived beyond the first 9 months of life were more likely to have received measles vaccine than those who died. These results helped change a perception that measles was an insignificant contributor to IMR in Haiti.

Figure 1. Immunization Coverage in Cite Soleil, 1985-1990



Prospective

The major future challenge for EPI will be to maintain long-term commitment so that the program does not suffer the declines experienced by other programs, such as CDD or malaria.

Although efforts to improve access should continue, the proportion of the population with access to immunization services has been increased significantly. Therefore, the future focus should be on in-

creasing demand for services by those with access to immunization, and lowering the drop-out rate of those whose infants have not completed the 3-dose cycle of DPT and Polio vaccinations. This will require technical and management training of health staff and improved health education and communication. Both the PVOs and the Ministry will need technical assistance, especially in cold-chain maintenance. Norms and procedures in the private voluntary sector need to be standardized and coordinated with those of the Ministry.

Since tetanus toxoid has been shown to be a major contributor to IMR and current estimates of coverage rates are still low, a new strategy may be required. Currently the approach is very dependent on rally posts, and this may not be the only way to reach women, particularly those who do not currently have small children. Planners should explore the potential for using schools and market places for the point of contact.

A strategy that also focuses on areas where there is currently low coverage might be the most productive way of pushing EPI forward, and a strategy of increased emphasis on measles and neonatal tetanus should be followed. Like the other child survival interventions, EPI needs a long-term communication strategy, based on an overall vision, that includes communication objectives, targets, and monitoring and evaluation plans. Further support of applied research on EPI is also required to better understand the parent and service provider's perspectives and to develop a communication strategy and improve service-delivery strategies.

Control of Diarrheal Diseases

Retrospective

According to the EMMUS study of 1987, 27 percent of child deaths were attributed to diarrhea, and an additional 12 percent of deaths were attributed to diarrhea and associated respiratory infections. Diarrhea prevalence was estimated at 42 percent within the past 2 weeks and at 14 percent within the past 24 hours. Prevalence was lower for households with controlled water and latrines. Forty-eight percent of Haitian households had access to latrines—89 percent in the Port-au-Prince area, 78 percent in other urban areas, and only 33 percent in the rural areas. Access to controlled water supply within households was 45 percent for all households—89 percent for Port-au-Prince, 81 percent in other urban areas, and only 29 percent in rural areas (Cayemittes 1989).

A.I.D.'s CDD strategy has focused on (1) preventive activities such as the development of water and sanitation systems and (2) social marketing and education in the preparation of oral rehydration solutions (ORS), both with home mix and purchased packets.

Preventive Interventions

As part of a CDD preventive strategy, the A.I.D. Mission has made significant investments in the development of water and sanitation systems.

The CARE Community Water System Development (CWSD) project, a 6-year effort with an \$8 million budget, has been A.I.D.'s most significant undertaking in this area. The project collaborated closely with the National Potable Water Service (SNEP) and made a special effort to involve the participating communities in all phases of project implementation through the development of 36 community water associations. These associations, with support from SNEP, assume the responsibility for operating, maintaining, and managing the water supply systems. Hygiene education and sanitation activities were integral components of the community activities, and over 90 percent of the people living in the system service areas are using the water supply systems constructed under the CWSD project. The number of latrines owned and used by the over 100,000 households in participating communities almost doubled during the project (Buijs 1991). Community members interviewed during this impact evaluation felt that the incidence of diarrhea had declined since the establishment of water and sanitation systems and that it had become a very rare event for a child to die from diarrhea in their communities. While it is not possible to confirm these opinions with quantifiable data, the positive impact on health status of similar projects in other countries has been well documented.

Some USAID/Haiti projects, such as the Cite Soleil site, show rates of diarrhea prevalence that are lower than the national levels. Particularly since these are areas where sanitary conditions may be worse than the norm, it is likely that the lower prevalence rates are due to project training in hygiene and the promotion of breast-feeding (CDS 1990).

Oral Rehydration Therapy

Levels of public awareness of oral rehydration therapy (ORT) were high even in 1980: in rural areas half of the women had heard of ORT (Allman 1983). However, there was often a tendency for medical personnel to view ORT as a second-rate treatment. Studies conducted in 1980 after the introduction of an A.I.D.-funded ORT ward into the University Hospital showed striking results: (1)

After 6 hours of oral treatment, 66 percent of the patients were effectively rehydrated compared with none of the patients treated intravenously, (2) the daily cost for ORT treatment was \$0.20 compared with \$8.00 for intravenous treatment, and (3) the mortality for gastroenteritis was 40 percent in the pediatric service prior to the introduction of the ORT ward. Immediately after its introduction, there was a 13 percent mortality rate in the ORT beds, with 7 percent directly attributed to gastroenteritis. The rest of the pediatric unit had a mortality rate of 48 percent. Eight months later, the ORT beds had a mortality rate of 2 percent, and none of the deaths could be directly attributed to infectious gastroenteritis (Pape 1981).

These results, augmented by the significant body of research that had been conducted in other countries, convinced the medical community of the efficacy of ORT. UNICEF supported the supply of ORS packets, and, through the efforts of the A.I.D.-funded Rural Health Delivery Systems (RHDS) project, CDD and ORT became the top priorities from among the priorities established under the Nouvelle Orientation.

However, ORT gained and then lost momentum. Although enthusiasm for ORT was widespread, the program had no clear leadership, although there was much energy and action through multiple leadership and funding. Political unrest prior to and after the departure of Duvalier devastated the program's momentum, and, by the time the worst of the political unrest had passed, the key individuals behind the ORT movement had either left the country or been reassigned to other positions. In the aftermath of anti-Duvalierism, there was public suspicion about the ORT program, originally identified with the former first lady, Michelle Duvalier, who figured prominently in the media campaign. The first packets donated by UNICEF were stamped as "a gift from the first lady to the children of Haiti." Faced with a crisis of leadership, the Haitian public health community responded by shifting attention away from diarrhea to diseases preventable through immunization. This response was partly elicited by developments on the international scene in which childhood immunizations became the focus of new programs and funding (Coreil 1989).

In 1987, an estimated 16 percent of children who had suffered from diarrhea within a 24-hour period were treated with ORS, 14 percent with packaged treatments, and 2 percent with home solutions. Other responses to an episode of diarrhea included pharmaceuticals, 24.1 percent; traditional medicine, 19.3 percent; other, 8.9 percent; and nothing, 32.6 percent (Cayemittes 1989).

Statistics on ORS use from the A.I.D.-funded child survival projects were generally much better than the national statistics (see Figure 2). However, most of the projects have suffered from two common problems: (1) a lack of readily available ORS packets and (2) mothers not being able to mix the solution properly,

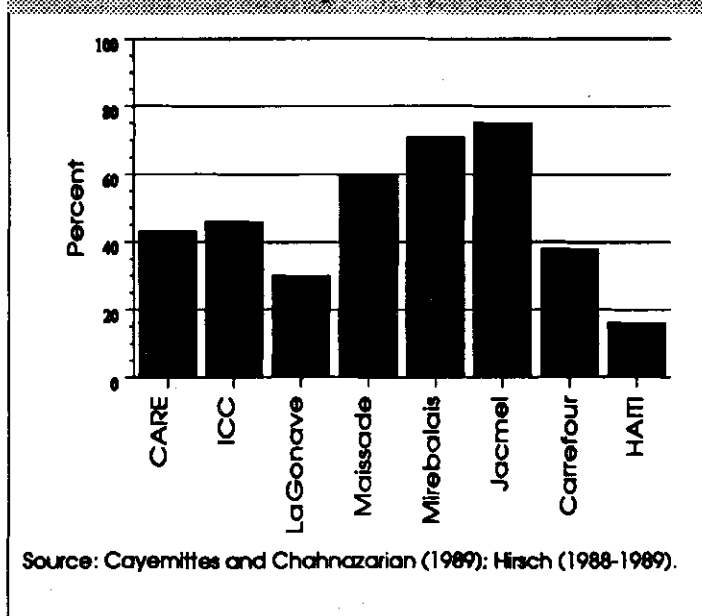
particularly when home-mix is being used. The problems with packaged ORS supply have naturally led projects to opt for a home-mix strategy despite the difficulty of teaching mothers to prepare it properly.

Prospective

Given the significance of the proportion of child deaths attributed to diarrhea, the CDD program needs a fresh injection of enthusiasm and resources, as well as a concerted strategy to ensure either production and distribution of ORS or good competency-based training in home mix.

The problems with mothers' ability to prepare the home-mix solution are not unique to Haiti, and these problems would seem to highlight the benefits of a CDD strategy that relies on providing and encouraging the use of packaged ORS (Wilson 1988). One A.I.D.-funded project that showed good results based on ORT education found that over 70 percent of mothers did not know where they could buy ORS packets (O'Rourke 1989). Strengthening the CDD program in this area will require revamping the supply system, beginning with a review of local production capacity and constraints, distribution and inventory management systems, and access to and incentives in public and private outlets.

Figure 2. ORT Utilization in Haiti and Selected USAID Project Sites



In addition to strengthening the supply side, a promotional package needs to be developed and implemented to increase demand for ORS. Although other avenues may be appropriate, mass media may be most effective: in 1987, utilization of ORS was 24 percent in households with radios and 13 percent in those without (Cayemittes 1989). A.I.D.-funded projects have shown that even interventions limited to education have been quite effective in increasing knowledge

and utilization rates above the national averages, particularly when innovative educational techniques are used (Cayemittes 1989; O'Rourke 1989).

A number of studies have pointed out that ORT fits well into the traditional health belief systems, especially if promotional techniques were used to identify it as a *refrechi* (i.e., herbal teas) (Arthur 1986; Coreil 1989). Some experts have suggested that more linkages should be made with the traditional sector in order to promote ORT, since providers in this sector are very influential, particularly in rural areas, and already use *refrechi*.

Other studies continue to document the effectiveness of ORT in reducing infant mortality and hospital admissions (Wardlaw 1988). The introduction of ORT centers in additional hospitals and other health facilities could strengthen the CDD program directly and, perhaps more importantly, provide a venue for training health care providers in ORT and gaining their support for a broadly based public campaign for ORT.

The proportion of diarrhea cases being treated with antibiotics, particularly tetracycline, highlights the need for strengthening the training of health care providers, including physicians (Cayemittes 1989; Wilson 1988). This practice is both wasteful and dangerous, because of the development of resistant strains of disease, and, in the case of tetracycline, the risk of toxicity after expiration.

Population and Family Planning

Retrospective

Demographics in Haiti have been and continue to be influenced by a complex interplay of forces. External and internal migration have changed sex ratios and affected the stability of unions, and, when combined with economics and social tradition, these factors have in turn influenced patterns in sexual unions, family formation, and fertility trends.

Although there is much discussion about methodologies used in fertility surveys and the interpretation of results, there is agreement among demographers that fertility rates have been increasing: from 5.48 children per woman in 1974-1977, to 5.87 from 1982-1983, to 6.26 from 1982-1984, to 6.4 from 1985-1987 (Cayemittes 1987). Some demographic experts see this as a normal trend caused by social changes such as reductions in levels or duration of breast-feeding, food given to supplement breast-feeding at an earlier age, sexual activity earlier and more fre-

quently, more women in union, and more stable sexual unions (United Nations 1990; J. May 1990). However, it is not clear which, if any, of these factors has been impacting the fertility rise specific to Haiti.

For those who do practice contraception, the most preferred methods are oral contraceptives, female sterilization, condoms, and injectables. Depo Provera and Norplant are available and are increasing in popularity, and, in some areas of the country, use of these methods exceeds that of oral contraceptives. There is some use of vaginal tablets and foam. Knowledge and use of vasectomy as a permanent form of family planning is limited, despite the relatively high use of female sterilization.

As with increases in fertility rates, the reasons for the low contraceptive prevalence rates are unclear. Tradition and socioeconomic factors influence a desire for larger families, and levels of education are linked to the use of contraception, as is normally the case elsewhere. However, levels of knowledge about contraception are high in Haiti: 81.3 percent among women and 84.1 percent among men. Both men (92.3 percent) and women (89.3 percent) believe that birth spacing is important. Although the country is predominantly Catholic, less than 1 percent of those questioned about why they were not using family planning mentioned religion as a factor. Finally, since Government policies and programs have supported family planning, there appear to be no serious political barriers.

Throughout the past two decades, the Government has recognized that demographic problems have to be addressed in order to remedy other socioeconomic problems. Haiti's family planning program was developed following a vertical approach to service delivery through the Division of Family Hygiene, operating initially through fixed health facilities in urban centers with community outreach and mobile services added in 1977. From some accounts, both the family planning and nutrition programs suffered tremendously from being prematurely integrated into "a weak, decentralized, poorly articulated health system" during the early 1980s, and this integration effort appears to correspond with the dip in contraceptive prevalence (Allman 1987). In late 1986, the Government established the National Council on Population with responsibility for the formulation, implementation, and monitoring of population policy.

In the 1989 Contraceptive Prevalence Survey, Ministry facilities were cited as a specific known source of contraceptive services and supplies by over 90 percent of those who knew a source but were not currently using contraception. This may indicate that the Government has been performing better than the PVO sector in the area of family planning services. It may be that the PVOs, many of which have religious philosophical roots, are less comfortable with family planning than they are with other child survival interventions. On the other hand, given the proliferation

of institution mixtes and the relatively recent advent of family planning services through PVOs, these statistics could be misleading since many people may not know that a former Ministry clinic is now managed by a PVO.

During the 1980s, A.I.D. support targeted exclusively for population and family planning totalled over \$30 million. In addition, funds for the child survival program provide for activities in family planning. Although A.I.D. has promoted and financed birth spacing as part of its overall program in health and child survival, there has been no specific population or family planning strategy which has guided program interventions. The CDD and EPI programs have also received more attention from both the Ministry and the PVOs.

Much of A.I.D.'s funding for the private nonprofit sector has gone through International Planned Parenthood Foundation (IPPF), which has in turn financed nine Haitian institutions, including its Haitian affiliate, PROFAMIL (Association Pour la Promotion de la Planification Familiale). PROFAMIL, which began offering services in 1984, operates three urban clinics and three community-based distribution programs which are currently reporting a 30-percent contraceptive acceptance rate.

Prospective

Prospects for significant gains in the family planning program appear to be strong. The Government's commitment, coupled with strengthened service delivery in the private and public sectors, and increasing demand by Haitian men and women suggest that Haiti may be poised for rapid and significant increases in contraceptive prevalence and, therefore, reductions in fertility. According to a 1989 contraceptive prevalence survey, 21.4 percent of men and 27.2 percent of women would use family planning services if they had access to them (Cayemittes 1991).

However, major efforts are required to exploit the potential that this unmet demand offers. First, the family planning program must be given greater priority. Then, as is the case for CDD, the program needs both to strengthen the service delivery and distribution system and to develop a strong marketing and promotional plan.

With the general strengthening of the public sector envisioned in the next 5 years, family planning emphasis should be promoted by providing access to services and through policy dialogue with Government and religious leaders, as well as assistance in training, commodities, logistics, and technical assistance. Barriers to the expansion of family planning programs should be addressed through dialogue between policymakers and service providers, and through research that deepens the

understanding of resistance created by cultural attitudes and beliefs, or lack of knowledge.

Other approaches to promotion of and education about family planning should be explored, such as the introduction of family life education, perhaps coordinated by the ministries of health and education as part of the curricula in primary and secondary schools, or as part of literacy programs. These forums might also address other health behavior issues such as the increase in adolescent fertility, sexually transmitted diseases, and AIDS cases. Information, education, and communication materials should be developed as motivational tools, as well as educational ones, and the use of radio and television spots, as well as printed materials, should be encouraged. Additional efforts in family planning education should be targeted at males, particularly to encourage male responsibility for family planning and the choice of vasectomy as a permanent sterilization method.

Finally, the quality of care issue should be seriously addressed, particularly as it relates to high drop-out rates and rejection of some contraceptive methods. However, the most basic barrier to increases in contraceptive prevalence is access to services and particularly to commodities.

Nutrition and Breast-Feeding

Retrospective

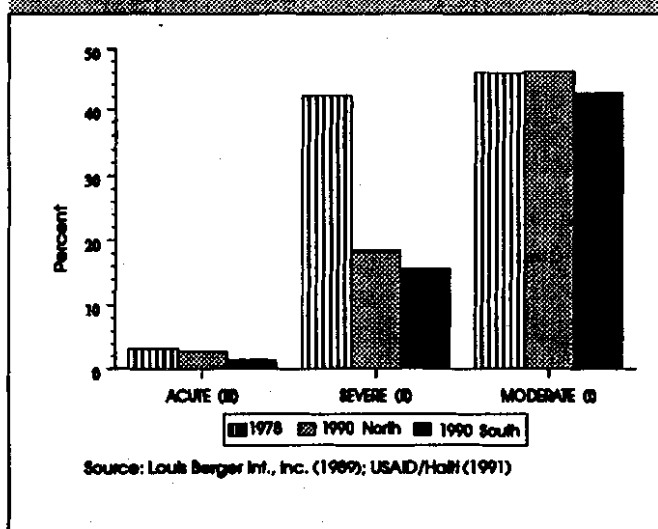
Malnutrition is a basic underlying problem related to infant and child mortality in Haiti. The 1978 National Nutritional Survey showed that almost 75 percent of Haitian children under 5 years were undernourished, with approximately 30 percent suffering moderate or severe malnutrition according to the Gomez classification (Mock 1988). Two nutritional surveys conducted by the Centers for Disease Control in 1990 indicated that these rates had dropped somewhat to a range of 59.6 to 67.4 percent, depending on geographical location, with the southern region of the country faring better than the north. Methodological differences in the surveys make it difficult to draw strict comparisons between the 1978 and 1990 surveys. However, the data indicate that, while some gains may have been made in reducing malnutrition (see Figure 3), chronic malnutrition still affects at least 60 percent of the under 5-years-old population.

Declining per capita food production has resulted in a per capita calorie deficit in Haiti that is the seventh worst in the world, ranking behind countries such as Bangladesh and Ethiopia (World Environment Data Sheet 1991). Economic stagna-

tion and a steady decline in GDP have decreased the purchasing power of the average Haitian household, resulting in a disproportionate amount of income spent on food: an average 56 percent of total household expenditure went to food in 1989, with 62 percent in rural areas and 40 percent in urban areas. Despite this high expenditure level, nearly 50 percent of households in Haiti had less than 75 percent of the recommended daily calorie intake, and 36 percent had less than 75 percent of the recommended daily protein intake (Jensen 1989). The at-risk population of children under 5 years old and pregnant and lactating women suffer from protein-calorie malnutrition, vitamin A deficiency, and nutritional anemia.

In 1987, while the mean duration of breast-feeding was estimated at 17.5 months, 85.5 percent of mothers gave supplementary foods during the first three months, sometimes as soon as the first 2 weeks, introducing the risk of contaminated food and subsequent gastroenteritis. Only 14 percent of infants under 3 months of age were considered adequately nourished (Cayemittes 1989). Thus the pattern of malnutrition, and practices that diminish health status in other ways, starts early for Haitian children. During the early 1980s in Cite Soleil, the risk of dying for a child being admitted to the hospital was 3 to 4 times higher for a child suffering from third degree malnutrition than for a child with mild or moderate malnutrition (Boulos 1985).

Figure 3. Percentage of Children Under 5 Years Old With Malnutrition, 1978 and 1990



A.I.D. has focused on nutrition as a major component of its child survival strategy and funded a number of innovative programs throughout the 1980s. These interventions have consisted of growth monitoring and surveillance, nutritional education and promotion of sound breast-feeding and weaning practices, food supplementation, nutritional management of diarrheal episodes, and vitamin A distribution (USAID/Haiti 1989).

A.I.D. has also supported research on factors affecting nutritional status.

Studies have been conducted on the relationship between nutritional status and low birth weight, breast-feeding, immunization status, advancing age, and other risk factors. In some cases the impact of interventions has been measured, such as the impact on birth weight for pregnant women taking Erythromycin. A study in Cite Soleil showed that if women with infections were treated with Erythromycin during their third trimester, their incidence for low birth weight babies could be reduced by 70 percent (Boulos 1985).

Some A.I.D.-funded projects that included nutritional interventions have demonstrated significant results in reducing malnutrition and incidence of diarrhea. The CARE CINEC project, followed by the RICHES project, was able to reduce chronic levels of malnutrition by two-thirds through interventions that included supplemental feeding through Title II food programs, nutritional surveillance, and creative education techniques (O'Rourke 1984). The RICHES project also promoted exclusive breast-feeding, and evaluation results indicate that the incidence of diarrhea was reduced to 12.8 percent in 0-4 year olds, as compared with the national average of 42 percent (Conway 1989).

Vitamin A supplementation has been an intervention in a number of A.I.D.-funded PVO projects, and research funded through the Nutrition, ORS, and Vitamin A (NOVA) project has contributed to the emerging global understanding of the potential impact of vitamin A supplementation (Stansfield 1991).

One of the most significant A.I.D. interventions which has impacted overall nutritional status in Haiti is the Title II Program. Program funding is estimated at \$77 million over the decade: 80 percent was used in school feeding programs; 13 percent in maternal and child health (MCH) programs; and the remainder in food-for-work programs (USAID/Haiti 1991). The Title II Program provides supplemental food to approximately 500,000 children annually, or roughly 20 percent of all Haitian children under the age of 15 years for at least 9 months of the year. Given the overall food deficit in Haiti, it is likely that this supplemental food serves as a "safety net" for the children and possibly their families (Cotton 1985).

This overall safety net effect is both desirable and necessary in Haiti, given the declining socioeconomic and food production situation. However its impact on the most at-risk group under the age of 5 years is limited to the 13 percent of this group who participate in the MCH component of the Title II Program, and this limits its impact on child survival.

Prospective

Given the high levels of malnutrition in Haiti and the deleterious effect on the health status of infants and children, targeted nutritional programs should be a priority for future A.I.D. child survival programs. While some projects have had solid success in reducing malnutrition and the incidence of diarrhea, the number of these projects has been limited and their target populations have been small. In addition, other programs, such as Title II, could be more effective in targeting the most at-risk groups. This would require shifting funding away from the school feeding programs, which, although they offer a ready forum for the program, do not serve the under 5 years age group or even the more disadvantaged members of the older age group who do not attend school.

The importance of having a safety net for malnourished children, and particularly the at-risk groups, should not be underestimated. Supplemental feeding programs should be continued, and more specific programming objectives addressing nutritional status should be incorporated into the Title II Program.

Some experts have stressed the need to base nutrition interventions on education, using supplemental feeding as a way of demonstrating to mothers the impact good nutrition has on their children. The Nutrition Demonstration Foyer, a project which implemented this strategy, was seen as a model for combatting malnutrition in Haiti (Berggren 1984).

Key Issues and Recommendations

The team expanded its scope of consideration beyond the impact of the program on child survival to a number of issues that manifested as recurrent themes throughout our review. There were three significant issues. First, given the level of A.I.D. investment in Haiti, have gains in child survival been adequate? To what extent has the political and socioeconomic situation in Haiti affected the child survival program, and what implications does the situation have for A.I.D.'s future development strategy? Second, what lessons have been learned from the public and private service delivery mix in Haiti, both for past and future impact on child survival and primary health care. Third, has the child survival strategy in Haiti, based on selected interventions, helped build a foundation for more expanded and integrated primary health care?

The interrelationship among these three issues is complex and can only be partially disentangled. However, the questions raised by these issues are questions that relate to the underpinnings of A.I.D.'s child survival and health development strategy in Haiti and elsewhere. While Haiti has been and continues to be in a relatively unique political and socioeconomic situation, there are many aspects of the Haitian experience in child survival that are analogous with the situations of other countries, particularly in sub-Saharan Africa. And it is in those countries, like Haiti, with the most problematic of environments that child survival programs are most desperately needed.

Have Gains Been Adequate?

Less than 2 hours from the continental United States, Haiti is the least developed nation in the Western Hemisphere with economic and demographic characteristics akin to sub-Saharan Africa. A major recipient of A.I.D. assistance, particularly for the health and population program, Haiti has made impressive gains in reducing mortality and increasing preventive services relative to the situation 20 years ago. During the past two decades, the country has launched a series of promising rural and urban health programs, trained a cadre of well-qualified health personnel, and conducted internationally recognized research. However, relative to its Caribbean neighbors and the rest of the developing world, Haiti has lagged behind.

Greater results might have been achieved if further emphasis had been put on (1) implementing key policy initiatives, such as reducing the proportion of Ministry

resources consumed by personnel and rationalizing the distribution of personnel, (2) sustaining each of the programs for a more prolonged period so they would not lose momentum, and (3) carrying out more selective targeting, such as concentrating EPI on the under-1-year-old group and concentrating nutrition interventions on the under-5-years-old group. Some of these areas, such as the implementation of key policy initiatives, received significant emphasis during the decade, but, in hindsight, it appears that greater progress might have been achieved in the other areas. However, much of the discrepancy between Haiti's current child survival indicators and those of other developing countries is most apt to be the result of the combination of negative economic, sociopolitical, and environmental trends that have been interacting in Haiti for a prolonged period.

What Are the Lessons From the Public/Private Health Sector Model?

While PVOs have been involved in the health sector for some time, A.I.D. support has increased their importance. PVOs are now providing health services to over 30 percent of the total population and perhaps as much as 50 percent of the rural population. They are seen as major, serious actors that have legitimacy with both the Government and the public.

Increased funding to PVOs has encouraged cooperation between the public and nonprofit private sectors. There are a variety of examples of cross-fertilization of good ideas developed within A.I.D. child survival projects: both design and implementation strategies have been replicated between government and PVOs, among PVOs themselves, and across the various sectorial programs of individual PVOs. An even more concrete example of the public and private cooperation is the proliferation of institution mixtes staffed and funded through a combination of Government and PVO resources.

The development of the public and private health delivery system has highlighted the potential strengths of each of these two partners and the need to strengthen this partnership in ways that will develop and maximize these strengths.

The public sector's unique potential strengths and advantages include its ability to set norms, standards, and protocols for the various health interventions; its position to coordinate the multiple organizations involved in implementation; its existing infrastructure and extensive, although currently maldistributed, human resources. Given the potential role the government can play and the multiple weaknesses in the public sector's past performance, A.I.D. should support and encourage the new Government to develop that role to its full potential.

The nonprofit private sector's unique potential strengths and advantages include its ability to design and implement more flexible, innovative, and risk-taking projects; the potential to offer incentives (both monetary and nonmonetary) to staff; the ability to adapt rapidly to changing circumstances; and, particularly, the ability to foster participation and commitment by being rooted in the communities.

While the potential benefits of a partnership between the nonprofit private and public sectors have become clear, conflict has often arisen and will arise in the development of such a partnership, and improved coordination is essential for the achievement of child survival goals.

Has the Program Built a Foundation for Integrated Primary Health Care?

Throughout the review we asked another question, more broadly applied to A.I.D.'s worldwide child survival strategy: Is the child survival strategy—these selected interventions—providing the foundation for an expanded and strengthened primary health care delivery system? Can child survival be the engine that pulls the primary health care train?

The simple answer is that, within the Haitian context, we can be hopeful but not, at this point, certain. Aspects of the child survival strategy, particularly in EPI, might provide building blocks in the foundation of a stronger, expanded primary health care system. However, all programs, including EPI, have at one point or another lost, and sometimes regained, momentum during the past decade. This fact is a reflection of both the environment in which these programs have operated and the fragility of the individual programs.

Key Recommendations

Recommendations specific to individual programs were included in the sections of the report that discussed the four child survival interventions. Those recommendations that are common to all four programs are summarized below, along with other recommendations that address issues beyond the scope of current child survival programs.

- **Continue and further refine targeting.** Further targeting of high-risk populations should increase the impact of the child survival program. Since neonatal deaths still comprise 40 percent of all infant deaths in Haiti, child survival interventions might be concentrated on the causes of death for this age group (Bicego 1990). Other strategies should include geographical targeting, such as urban slums or rural drought areas, and a concentration on high-risk age groups for selected interventions, such as infants under 1 year old for immunization and under 5-years-old children for nutrition interventions.

- **Sustain and increase support for child survival interventions.** It is clear that all child survival interventions require sustained support in terms of both financial resources and the energy and attention of personnel.

Further support of applied research is required for all child survival program interventions to better understand health-related behavior and the service providers' perspective as they relate to the design and implementation of interventions and the impact of their decisions on health-seeking behavior. All health delivery strategies need to be based on an understanding of the knowledge, attitudes, beliefs, and practices within target populations.

- **Assist both the public and nonprofit sectors in the areas of policy formulation, strategic planning, project design and implementation, and development and establishment of operating systems.** Both sectors need to strengthen their ability to manage personnel and resources and to develop, implement, and entrench personnel systems, financial systems, and logistics systems that will support the delivery of services. Logistics systems are particularly important for family planning and ORS, as the limited access to commodities is curtailing the success of these programs. Based on a clearer understanding of what influences health-seeking behavior, all programs need a health promotion strategy with clear objectives, targets, and monitoring and evaluation plans.

- **Increase priority of family planning.** Of the four key child survival interventions, family planning should be elevated to a higher priority in the future. The relationship between child spacing and mortality beyond the neonatal period is strong in Haiti (Bicego 1990). Also, there may be greater potential for major increases in contraceptive prevalence than there is for further progress in either EPI coverage rates or ORS utilization, given the high levels of unmet demand for family planning services (Cayemittes 1991).
- **Build on what has been achieved, continue the policy dialogue, and further develop public/nonprofit partnership.** Within the current health delivery system—both public and private nonprofit—it will be important in the future to build on what exists rather than making major changes in strategy that might erode past successes. For example, a rapid shift in support from the private nonprofit sector to the public sector could create disequilibrium. Support should be provided to both sectors to build and strengthen the provision of health services in both sectors.

The partnership between the public and nonprofit sectors needs to be further developed and coordinated. Mechanisms need to be developed that will standardize and coordinate both administrative and clinical norms and procedures, and policies incorporating such mechanisms must be formulated. Examples of the kinds of issues that need to be considered range from standardizing contractual arrangements between the Ministry and a PVO for administration of an institution mixte to standardizing the directions health providers give to women about when to take the first birth control pill in a monthly cycle.

In order to strengthen its own role, the Ministry of Health needs to act on a series of policy issues. Two key examples requiring action are the need to reduce current personnel levels within the Ministry in order to free funds that will equip and supply remaining staff and the need to reallocate personnel to rural areas to better balance urban and rural access to services.¹

¹ Cuts in Ministry staff, if done appropriately, could improve the quality of services provided by eliminating those on staff who are "ghost workers" and bringing efficiency to the system. Funds saved could then go to provide the needed equipment and drugs to help health centers run better.

Appendix

USAID Funding to Haiti Child Survival Activities	
1989-1990	
Bilateral Projects	
MCH/Family Planning II	3,875
Rural Health Delivery System	19,756
Urban Health & Community Development	1,243
Family Planning Outreach	13,948
Management of Malaria	13,400
Community Water System Development	8,000
Community Health Outreach	250
NGO Support II: Community Health Outreach ^a	836
Urban Health & Community Development II-OPG	4,220
Mobilizing Mothers for Child Survival	5,400
Private Sector Family Planning	8,250
Population for Development ^a	3,250
Voluntary Agencies for Child Survival ^a	12,000
NGO Support V (Population)	500
Expanded Urban Health Services	6,000
Centrally Funded Health Activities	
Child Survival Grant for ADRA ₁	510
Child Survival Grant to ICC	408
Child Survival Grant to SAWSO	144
Child Survival Grant to PLAN	474
Community Integrated Nutrition and Education Centers	696
Eye Care: PVO Vitamin A	166
Helen Keller International: PVO Vitamin A	250
CSAP Support: JHU CS Fellows	609
REACH	591
PRICOR II	450
Vitamin A Grant to World Vision ^a	650
Child Survival Grant to World Relief Corporation ^a	300
Vitamin A Grant to Save the Children Federation ^a	200
Child Survival Grant to Eye Care	115
Centrally Funded Population Activities	
Training in Reproductive Health	261
Family Planning International	60
Strategies for Improving Service Delivery	164
Extending FPS Through Third World Women Managers ^a	75
Family Planning Management Training	70
TOTAL	107,121

^aEstimate of expenditure through 1990.

Source: Selected data from "Haiti USAID Population and Health Profile."

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